

SUG101

**DELPHION**

RESEARCH

PRODUCTS

INSIDE DELPHION

My Account

Search: Quick/Number Boolean Advanced

**The Delphion Integrated View**Get Now: ☒ PDF | [More choices...](#)Tools: Add to Work File: [Create new v](#)View: [INPADOC](#) | Jump to: [Top](#) ☒ Go to: [Derwent](#) ☒Title: **JP08338546A2: PRESSURE TYPE FLOW CONTROL DEVICE**

Derwent Title: Pressure type flow rate control appts. used in semiconductor and chemical manufacturing plants - adjusts orifice upstream side pressure by opening and closing control valve, to control orifice downstream side flow rate  
[\[Derwent Record\]](#)

Country: JP Japan

Kind: A (See also: [JP03291161B2](#))

Inventor: NISHINO KOJI;  
IKEDA SHINICHI;  
MORIMOTO AKIHIRO;  
MINAMI YUKIO;  
KAWADA KOJI;  
DOI RYOSUKE;  
FUKUDA HIROYUKI;

Assignee: FUJIKIN:KK  
[News, Profiles, Stocks and More about this company](#)

Published / Filed: 1996-12-24 / 1995-06-12

Application Number: JP1995000144722

IPC Code: F16K 17/22;

Priority Number: 1995-06-12 JP1995000144722

Abstract: PURPOSE: To heighten the control accuracy of a flow control device and to reduce the size and cost of the device.  
CONSTITUTION: A pressure type flow control device is adapted to control the flow of a fluid by keeping the orifice upstream side pressure about two or more times as large as the downstream side pressure. The flow control device comprises an orifice 5, a control valve 2 disposed on the upstream side thereof, a pressure detecting device 3 disposed between the control valve 2 and the orifice 5, and an arithmetic control device 6 for computing the flow from the detected pressure P1 of the pressure detecting device 3 as  $Q_c = K P_1$  (wherein K is a constant) and outputting a difference between a flow command signal  $Q_s$  and the computed flow  $Q_c$  as a control signal  $Q_y$  to the driving part of the control valve 2. The pressure P1 is regulated by opening and closing the control valve 2 to control the downstream side flow of the orifice 5.

COPYRIGHT: (C)1996,JPO



INPADOC None Get Now: [Family Legal Status Report](#)

Legal Status: CH DE FR GB IT LI NL

Designated Country: Show 14 known family members

Forward Go to Result Set: [Forward references \(2\)](#)

## References:

PDF	Patent	Pub.Date	Inventor	Assignee	Title
	<a href="#">US6450190</a>	2002-09-17	Ohmi; Tadahiro	Ohmi; Tadahiro	<a href="#">Method of detecting abnormal flow rate in pressure-type</a>
	<a href="#">US6158679</a>	2000-12-12	Ohmi; Tadahiro	Fujikin Incorporated	<a href="#">Orifice for pressure type control unit and process manufacturing orifice</a>

Other Abstract  
Info:

[DERABS G97-036302](#)



[Nominate this for the Gallery...](#)



**THOMSON**

Copyright © 1997-2005 The

[Subscriptions](#) | [Web Seminars](#) | [Privacy](#) | [Terms & Conditions](#) | [Site Map](#) | [Cont](#)



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: 08338546 A

(43) Date of publication of application: 24.12.1996

(51) Int. Cl. F16K 17/22

(21) Application number: 07144722

(22) Date of filing: 12.06.1995

(71) Applicant: FUJIKIN:KK

(72) Inventor: NISHINO KOJI  
 IKEDA SHINICHI  
 MORIMOTO AKIHIRO  
 MINAMI YUKIO  
 KAWADA KOJI  
 DOI RYOSUKE  
 FUKUDA HIROYUKI

## (54) PRESSURE TYPE FLOW CONTROL DEVICE

## (57) Abstract:

**PURPOSE:** To heighten the control accuracy of a flow control device and to reduce the size and cost of the device.

**CONSTITUTION:** A pressure type flow control device is adapted to control the flow of a fluid by keeping the orifice upstream side pressure about two or more times as large as the downstream side pressure. The flow control device comprises an orifice 5, a control valve 2 disposed on the upstream side thereof, a pressure detecting device 3 disposed between the control valve 2 and the orifice 5, and an arithmetic control device 6 for computing the flow from the detected pressure  $P_1$  of the pressure detecting device 3 as  $Q_c = KP_1$  (wherein  $K$  is a constant) and outputting a difference between

a flow command signal  $Q_s$  and the computed flow  $Q_c$  as a control signal  $Q_y$  to the driving part of the control valve 2. The pressure  $P_1$  is regulated by opening and closing the control valve 2 to control the downstream side flow of the orifice 5.

COPYRIGHT: (C)1996,JPO

